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Conference Abstract

Using Specify 7 as a Collections Management System for the Royal Botanic Garden Edinburgh Herbarium

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Abstract

The Royal Botanic Garden Edinburgh Herbarium (RGBE) uses Specify 7 as a Collections Management System (CMS) for managing the collections of herbarium sheets, cryptogam packets, carpological collections, and liquid-preserved and silica-dried material. It is also used to manage the metadata for transactions including accessioning incoming specimens, loans (in and out) and destructive sampling.

RBGE migrated to Specify in April 2022. This was undertaken using in-house migration scripts and with the help of the Specify support team. Alongside the migration, the RBGE herbarium team has worked on embedding existing and new workflows, including incorporating permit documentation and restrictions, cultivated material and data exports to aggregators.

As part of the migration, we chose to adopt a new model for how our specimens are represented, moving from a CMS where we had one record for each object in the collection, to one where the different preparations (e.g. herbarium sheet, carpological, fluid-preserved) of a collection are all held as part of a single collection object. This has enabled our users to easily see all the preparations of a single collection, including sampling records. This gives the curators a fuller view of our holdings and reduces duplicated effort for data entry.

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The move to Specify and the new data model for specimens has enabled us to better manage incoming specimens by utilising the Accessions and Permits tables. The restrictions from the permits are recorded as part of the accession record, using two basic categories to allow the curatorial team to quickly determine whether there are any restrictions on the material that has been requested.

When the decision was made to migrate to a new CMS, our living collections were also moved, meaning the collections are now managed in two separate CMSs. This has been challenging for the management of our collection of cultivated herbarium specimens, which can be more complicated than a standard herbarium specimen. To help us manage the cultivated specimens, we have the concept of two separate collecting events. Firstly, there can be a specimen collected in the wild. When this collection was made, material could have been collected for cultivation in our living collection. Secondly, we can have a collection made from our living collection. This specimen has its own collecting event, but it is also linked to the specimen collected in the wild. We are creating links between these two separate collection objects to maintain this relationship, along with providing links to our living collection.

We have aimed to integrate mass digitisation with curation and have worked with an external contractor to develop tools for large-scale cataloguing, which work directly with Specify 7. Our Minimal Data entry tool allows our digitisation team to rapidly create “stub” records at the MIDS (Minimal Information about a Digital Specimen) Level 1, enabling the cataloguing of the collection ahead of imaging.

More recently, we have developed a tool to work alongside Specify, to allow for batch determinations of specimens to support large-scale record updates following research visits, loan returns and re-curation of the collection. Users are able to select the kind of determination, the taxon of the determination, and other optional information. They can then scan the barcodes of the specimens for which this new determination is to be applied, and the relevant records are updated. This has sped up the process of adding new determinations to large numbers of specimens.

By moving to Specify 7, we have benefited from a cloud-based solution, which has increased availability of our CMS to both remote and on-site staff. By choosing to have our cloud instance managed by the Specify team, we have lowered maintenance overhead, provided better back-up provision and increased system upgrade frequency. We have also benefitted from an emerging small, but active, community of herbarium-based Specify users.

Keywords

data migration, determinations, digitisation, permits, cultivated herbarium specimens

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Conflicts of interest

The authors have declared that no competing interests exist.